

I. Withdrawal of Claim 29

The Examiner withdrew pending claim 29 on the basis that it ". . . is directed to an invention that is independent or distinct from the invention originally claimed . . ." (see, Office Action, page 2). The Examiner contends that 5 claim 29 is directed to a non-elected invention. Applicants respectfully disagree and point out that originally filed and elected claim 15B was directed to a method of forming a duplex using the nucleic acids of the present invention. Claim 29 is directed to a method of detection accomplished by forming a duplex. Applicants submit that claim 29 is derived from elected claim 15B and therefore is directed 10 to the elected invention.

However, in order to expedite prosecution of the present application, Applicants have canceled claim 29, without prejudice.

II. Rejection of Claims 19-28 and 30 under 35 U.S.C. 101

15 The Examiner rejected claims 19-28 and 30 under 35 U.S.C. 101 on the basis that ". . . claimed invention lacks a credible specific and substantial asserted utility or a well-established utility" (see Office Action, page 3).

20 The Examiner indicates that no such family of "Cysteine Rich Soluble Proteins" exist. Applicants respectfully remind the Examiner that they are their own lexicographer and can use any name they choose. Further more, cysteine rich proteins and proteins containing cysteine rich domains are well known in the art (see, e.g., Miyazaki, et al. (1999) J. Exp. Med. 189:413-422.)

25 The Examiner appears to focus on just two of several asserted utilities; the first is use of the claimed nucleotides as probes for RFLP blots, and the second for in situ assays to detect chromosomal abnormalities. The Examiner concedes that these uses are credible (see Office Action, page 4). Claim 27 is canceled and the rejection is therefore moot as to this claim.

30 Applicants point out that several other credible utilities are presented throughout the Application. For example, on pages 53-57, of the specification, Applicants set forth several utilities for the present invention, in particular, for use in diagnostic kits.

The Examiner contends that the utilities put forth in the specification may be credible, but are not substantial, specific, or well established utilities.

35 Applicants respectfully disagree. As noted above, the specification sets forth several utilities, in particular, use as a diagnostic. Applicants direct the Examiner to page 57, lines 6-20, where it is asserted that the expression of the present

invention is highly restricted to tissues and cell types that are representative of an inflammatory state, e.g., expression in inflamed tonsil tissue. Taken together, Applicants submit that one skilled in the art would believe that the present invention has a credible, substantial, specific, or well established utility as a 5 diagnostic marker for inflammation.

The Examiner also alleges that claim 27 is further rejected under this section because it is directed to non-statutory subject matter. As noted above, claim 27 is canceled and the rejection is therefore moot as to this claim.

In view of the foregoing, Applicants believe that the rejection of claim 19-10 28 and 30 under 35 U.S.C. 101 is overcome. The rejection may be properly withdrawn.

III. Rejection of Claim 19-28 and 30 under 35 U.S.C. 112, First Paragraph

The Examiner rejected claims 19-28 and 30 under 35 U.S.C. 112, first 15 paragraph on the basis that the invention is not supported by a substantial and specific utility or a well established utility, and therefore the skilled artisan would not know how to use the present invention.

As noted above, the present invention is supported by a specific and substantial utility or a well established utility. Applicants set forth use of the 20 present invention as a diagnostic, and taken together with its restricted expression in inflamed tissues and activated cell types, Applicants submit that the present invention is in fact, supported by a specific and substantial, and well established utility.

The Examiner further rejects claim 19 under this section as the 25 specification does not provide enablement for a polynucleotide encoding the “mature” polypeptide. Applicants disagree, and direct the Examiner to Table 1 on page 10 of the specification. The sequence disclosed has numbered residues from -18 to -1, and 1 to 90, of SEQ ID NO:2. One skilled in the art would know that the polynucleotides encoding residues 1 to 90 should encode 30 the mature polypeptide. The Sequence Listing on page 72 of the specification, defines the polynucleotides encoding the mature polypeptide as encompassing nucleotides 101 through 370.

As noted above, claim 27 is canceled, and the rejection is therefore moot as to this claim. In view of the above, Applicants submit that the rejection of 35 claim 19-28 and 30 under 35 U.S.C. 112, first paragraph, is overcome. Withdrawal of the rejection is respectfully requested.

IV. Rejection of Claims 19-28 and 30 under 35 U.S.C. 112, First Paragraph

The Examiner rejected claims 19-28 under 35 U.S.C. 112, first paragraph. The Examiner alleges that the specification provides one C23 polynucleotide species (SEQ ID NO:1) and one C23 polypeptide species (SEQ ID NO:2). Claim 5 27 is canceled and the rejection is therefore moot as to this claim.

Applicants are claiming a polypeptide comprising SEQ ID NO:2. Further Applicants claim the polynucleotide encoding a polypeptide of SEQ ID NO:1.

Applicants believe they are entitled to all degenerate variants of the polynucleotide sequence which encode a polypeptide of SEQ ID NO:2.

10 Degeneracy of the genetic code is well known, thus the skilled artisan would believe that Applicants were in possession of degenerate variants of SEQ ID NO:1 that encode SEQ ID NO:2.

In view of the foregoing, Applicants submit that the rejection of claims 19-28 and 30 under 35 U.S.C. 112, first paragraph, is overcome. Withdrawal of this 15 rejection is respectfully requested.

V. Rejection of Claim 27 under 35 U.S.C. 102(a)

The Examiner rejected claim 27 under 35 U.S.C. 102(a). As noted previously, claim 27 is canceled and the rejection is therefore moot as to this 20 claim. Applicants respectfully request that this rejection be withdrawn.

### Conclusion

Applicants' current response is believed to be a complete reply to all the outstanding issues of the latest Office Action. Further, the present response is a  
5 bona fide effort to place the application in condition for allowance or in better form for appeal. Accordingly, Applicants respectfully request reconsideration and passage of the amended claims to allowance at the earliest possible convenience. Applicants appreciate the Examiner noting that a potential interference may exist. Applicants respectfully request notice as soon as this  
10 issue is definite. Should the Examiner deem allowance inappropriate at this time, Applicants respectfully request an interview be granted with the undersigned to consider any issues.

Respectfully submitted,



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Enclosures:

20 1. Appendix A -- proposed claims

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